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IBM Corporation IP Law Dept. N50/040-4 1701 North St. Endicott, NY 13760			HUYNH, CONG LAC T	
			ART UNIT	PAPER NUMBER
			2178	

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/886,199	PRESS, ROBERT
	Examiner	Art Unit
	Cong-Lac Huynh	2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 February 2000.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-57 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-57 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: amendment filed 2/18/05 to the application filed 6/21/01.
2. Claim 57 is added.
3. Claims 1-57 are pending in the case. Claims 1, 20, 26, 46-48, 53-57 are independent claims.
4. The objection of drawings has been withdrawn in view of the submission of the black and white version of the drawings.
5. The objection of the specification has been withdrawn in view of the amendment of the specification.
6. The objection of claim 37 has been withdrawn in view of Applicants' explanation.
7. The rejection of claim 27 under 35 U.S.C. 112, second paragraph has been withdrawn in view of Applicants' explanation.
8. The double patenting of claims 3, 7, 26, 28, 32, 47, 48, 54 has been withdrawn in view of Applicants' arguments.
9. The objection of claim 42 as including the allowable subject matter has been withdrawn due to Examiner's mistake. Claim 42 includes the same limitations as claim 56 prior the amendment, and thus should be rejected as in claim 56.

Drawings

10. Figure 2 is objected to since there is no description of E₁, E₂, and E₃ in the specification.

Claim Rejections - 35 USC § 101

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 1-25, 55 remain rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims fail to meet MPEP 2106's definition of a datastructure: such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Dependent claims 2-19, 21-25 are rejected for fully incorporating the deficiencies of their base claims 1 and 20.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1, 7-8, 13-15, 18, 26, 32-33, 38-41, 44, 46-47 remain rejected under 35 U.S.C. 102(b) as being anticipated by Microsoft Corporation, copyright 1999, Microsoft Excel, referred as Excel, screenshots, pages 1-8.

Regarding independent claim 26, Excel discloses:

- overlaying a main drawer D_0 on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on D_0 , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning N additional drawers D_1, D_2, \dots, D_N , in an overlay pattern $\{D_1, D_2, \dots, D_N\}$ relative to D_0 wherein N is at least 2, wherein each drawers D_i ($i = 1, 2, \dots, N$) is adapted to being opened or to being closed, wherein the N additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes M buttons B_1, B_2, \dots, B_M respectively identifying a subset S_1, S_2, \dots, S_M of the data feed, wherein M is at least 1, wherein selection of button B_m causes the Search drawer to dynamically display S_m in spreadsheet format, and wherein m is one of 1, 2, ..., M (pages 3-6: positioning the Abbreviation spreadsheet on the Book2 spreadsheet so that the two additional spreadsheets PriorArts and Abbreviation are being positioned in an overlay pattern where each spreadsheet like each drawer is adapted to being opened or being closed; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia

respectively identifying the subsets of the data feed wherein M is at least 1, and wherein selection of button Internet, button Network, ... causes the PriorArts drawer to dynamically display the subset data of Internet or Network in spreadsheet format, where m is one of 1, 2, ..., M as seen on pages 3, 5)

Regarding claim 32, which is dependent on claim 26, Excel discloses selecting button B_m then highlighting B_m immediately following said selecting of B_m until the portion of S_M becomes initially viewable (**pages 3 and 5**: when selecting button Internet or button Network, button Internet or button Network is highlighted and the portion of Internet data or Network data is viewable).

Regarding claim 33, which is dependent on claim 26, Excel discloses selecting button B_m then highlighting in color B_m immediately following said selecting of B_m until the portion of S_M becomes initially viewable (**pages 3 and 5**: when selecting button Internet or button Network, button Internet or button Network is highlighted in white color and the portion of Internet data or Network data is viewable).

Regarding claim 38, which is dependent on claim 26, Excel discloses that the M buttons constitutes a portfolio of buttons that is user selectable from a menu that includes a plurality of portfolios of buttons, and further comprising selecting by the user the M buttons from the plurality of portfolios of buttons (**pages 3 and 5**: the buttons Internet, Network, Multimedia of the PriorArts excel are selectable from a menu that includes

these buttons and thus, selecting the buttons from the portfolio of buttons can be made by users).

Regarding claim 39, which is dependent on claim 26, Excel discloses dynamically selecting the multisubset of the data feed to be either all of the data feed or less than all of the data feed (**pages 3-4**: using the vertical control bar as in page 4 to select a desired subset of the data feed to be less than all of the data feed).

Regarding claim 40, which is dependent on claim 26, Excel discloses that the portion of the data feed is all of the data feed (page 2).

Regarding claim 41, which is dependent on claim 26, Excel discloses that the portion of the data feed is a portfolio subset of the data feed (**pages 3-4**: the data of Internet is a portfolio subset of the data feed, which is the PriorArts file).

Regarding claim 44, which is dependent on claim 26, Excel discloses providing the data feed includes providing a stored data feed (**pages 3-6**: the data of Internet or Network provided as in pages 3-6 is the stored data).

Claims 1, 7-8, 13-15, 18 are for a data display structure of the method claims 26, 32-33, 38-41, 44 and are rejected under the same rationale.

Regarding independent claim 46, Excel discloses:

- overlaying a main drawer D_0 on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on D_0 , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning N additional drawers D_1, D_2, \dots, D_N , in an overlay pattern $\{D_1, D_2, \dots, D_N\}$ relative to D_0 wherein N is at least 2, wherein each drawers D_i ($i = 1, 2, \dots, N$) is adapted to being opened or to being closed, wherein the N additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes M buttons B_1, B_2, \dots, B_M respectively identifying a subset S_1, S_2, \dots, S_M of the data feed, wherein M is at least 1 (**pages 3-6**: positioning the Abbreviation spreadsheet on the Book2 spreadsheet so that the two additional spreadsheets PriorArts and Abbreviation are being positioned in an overlay pattern where each spreadsheet like each drawer is adapted to being opened or being closed; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein M is at least 1)
- selecting a button B_m wherein m is one of 1, 2, ..., M (**pages 3-4, 5-6**: selection of button Internet, button Network, ... causes the PriorArts drawer to dynamically display the subset data of Internet or Network in spreadsheet format, where m is one of 1, 2, ..., M as seen on pages 3, 5)

- dynamically displaying S_m in spreadsheet format on the Search drawer, wherein said dynamically displaying is triggered by the selecting of the button B_m (**pages 3-4, 5-6**: by selecting button Internet, button Network, ... the PriorArts drawer, which is considered equivalent to the claimed Search drawer, dynamically displays the subset data of Internet or the subset data of Network in spreadsheet format, where m is one of 1, 2, ..., M as seen on pages 3, 5)

Regarding independent claim 47, Excel discloses:

- overlaying a main drawer D_0 on a display screen (page 2: Book2 on a display screen)
- dynamically displaying, in spreadsheet format on D_0 , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning N additional drawers D_1, D_2, \dots, D_N , in an overlay pattern $\{D_1, D_2, \dots, D_N\}$ relative to D_0 wherein N is at least 2, wherein the N additional drawers include a Search drawer and an Alerts drawer such that the Alerts drawer includes M buttons B_1, B_2, \dots, B_M respectively identifying a subset S_1, S_2, \dots, S_M of the data feed, wherein M is at least 1 (**pages 3-6**: positioning the Abbreviation spreadsheet on the Book2 spreadsheet so that the two additional spreadsheets PriorArts and Abbreviation are being positioned in an overlay pattern where each spreadsheet like each drawer is adapted to being opened or being closed; the PriorArts drawer includes the buttons Internet, Network, Document&Database,

Multimedia respectively identifying the subsets of the data feed wherein M is at least 1)

- opening and closing drawer Di wherein i is one of 1, 2, ..., N (pages 3-6: the files PriorArts and Abbreviation as disclosed in spreadsheet format are considered as drawers adapted to being opened or being closed when clicking on the PriorArts button or Abbreviation button for opening and clicking on the X button on the up right corner of each drawer for closing)

15. Claim 57 is rejected under 35 U.S.C. 102(b) as being anticipated by Microsoft Corporation, copyright 1999, Microsoft Excel, referred as Excel, screenshots, pgs 1-8. Claim 57 is for a system of method claim 26, and is rejected under the same rationale.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claims 17, 19, 43, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Excel as applied to claims 1 and 26 above and further in view of Polili, Conferencing Software Available for Windows, InfoWorld, Feb 7, 1994, vol 16, iss 6, pg. 44, 1 pg, printed from ProQuest as pages 1-2.

Regarding claim 43, which is dependent on claim 26, Excel does not disclose providing the data feed includes providing a live data feed.

Polili discloses providing a live data feed (**page 2**: "... Data from a spreadsheet, an image, or another document could be dropped in, as could *live* video of other participants").

It would have been obvious to an ordinary skill in the art at the time of the invention was made to have combined Polilli into Excel since Polili discloses having live video as data in the spreadsheet providing the advantage to incorporate into Excel to make a spreadsheet more interesting and attractive to users with live data instead of static data as usual.

Regarding claim 45, which is dependent on claim 44, Excel does not disclose that the stored data feed is a video data feed.

Polili discloses providing a live video data feed (page 2: "... Data from a spreadsheet, an image, or another document could be dropped in, as could live *video* of other participants").

It would have been obvious to an ordinary skill in the art at the time of the invention was made to have combined Polilli into Excel since Polili discloses having live video as data in the spreadsheet providing the advantage to incorporate into Excel to make a spreadsheet more interesting and attractive to users with live video data instead of text or graphics as usual.

Claims 17, 19 are for a data display structure included in the method claims 43, 45, and are rejected under the same rationale.

19. Claims 20, 22-24, 48, 50-54 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, copyright 1999, Microsoft Excel, referred as Excel, screenshots, pages 1-12 in view of Belzberg (US Pat No. 6,134,535, 10/17/00, filed 9/19/96).

Regarding independent claim 48, Excel discloses:

- overlaying a main drawer D₀ on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on D₀, a portion of a data feed (page 2: Book2 has a portion of a data feed)

- positioning N additional drawers D_1, D_2, \dots, D_N , in an overlay pattern $\{D_1, D_2, \dots, D_N\}$ relative to D_0 wherein N is at least 2, wherein each drawer D_i ($i = 1, 2, \dots, N$) is adapted to being opened or to being closed, wherein the N additional drawers include a Search drawer and an Alerts drawer such that the Alerts drawer includes M buttons B_1, B_2, \dots, B_M respectively identifying a subset S_1, S_2, \dots, S_M of the data feed, wherein M is at least 1, wherein selection of button B_m causes the Search drawer to dynamically display S_m in spreadsheet format, and wherein m is one of 1, 2, ..., M (pages 3-6: the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned in an overlay pattern where each file as each drawer is adapted to being opened or being closed; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein M is at least 1, and wherein selection of button Internet or button Network, ... causes the PriorArts drawer to dynamically display the subset data of Internet or Network in spreadsheet format, where m is one of 1, 2, ..., M as seen on pages 3, 5)

Excel does not disclose that the data feed comprises stock bids and offers on a stock exchange, and the buttons B_1, B_2, \dots, B_M are identified with a stock that trades on the stock exchange.

Belzberg teaches:

- using spreadsheet technology to disclose the data of the stock exchange (col 1, lines 14-39, figure 3B)

- the data feed comprises stock bids and offers on a stock exchange (figures 2B, 3A)
- the Bid column is included in the spreadsheet (figure 3B).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Belzberg into Excel since Belzberg discloses stock bids and offers on a stock exchange and a spreadsheet includes the Bid column, which is the stock exchange data, providing the advantage to incorporate the stock bids and offers in a stock exchange as data in the spreadsheet of Excel as well as identifying M buttons B_1, B_2, \dots, B_M with a stock that trades on the stock exchange. In applying stock exchange data to Excel, each type of stock exchange data such as stock bids or offers would be stored in a subspreadsheet Stock Bids or Offers represented by buttons Stock Bids and Offers included in spreadsheet Stock Exchange. These subspreadsheets and spreadsheet are analogous to spreadsheet PriorArts with subspeadsheets Network and Internet represented by buttons Network and Internet as disclosed in Excel.

Regarding claim 50, which is dependent on claim 48, Excel does not disclose that the live data feed comprises stock data selected from the group consisting of stock halt data, stock delay data, stock resume data, stock bid/offer cancellation data, and combination thereof.

Belzberg discloses the data feed in the spreadsheet comprises stock bid data (figure 3B).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Belzberg into Excel since Belzberg teaches that the data included in the spreadsheet is the stock bid data thus motivating to incorporate the stock bid data into Excel to use Excel as an effective tool for trading where the traders can execute their orders in a matter of seconds on their computer before the price or other condition have changed.

Regarding claim 51, which is dependent on claim 48, Excel and Belzberg do not disclose that the spreadsheet format includes a Time column, an Offer column, a Bid Vol column, an Offer Vol column, and a Status column.

Belzberg discloses the spreadsheet format includes a Symbol column, a Bid column, a Bid Size column, etc.,, (figure 3B). Belzberg further discloses the Offer data, the Bid volume data (col 3, lines 15-33, 51-57), the Previous Trade and the Order Log (figure 2A).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Belzberg to include the Time column, and the Status column since the Previous Trade and the Order Log data in Belzberg suggests that the time and the status of the trades be recorded and accordingly such time data and status data be disclosed in the suitable columns of the spreadsheet. Further, the Offer data and the Bid volume data in Belzberg suggests to include the Offer column and the Bid Vol column for containing the Offer data and for the Bid volume data in the spreadsheet for completely disclosing the data relating to the stock exchange.

Regarding claim 52, which is dependent on claim 50, Excel and Belzberg do not disclose that the spreadsheet format further includes at least one of a Halt Reason column and a Corp Action column.

However, Belzberg does teach that the spreadsheet comprises a plurality of columns for containing data related to the stock exchange (figure 3A, col 3, lines 51-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Belzberg to include the Halt Reason column and the Corp Action column to disclose the halt data and the action data since the Quit function (figure 2C) and the Order Log (figure 2A) suggests containing the halt data and the action data in Belzberg, and thus suggests including the proper columns for disclosing such data in the spreadsheet.

Regarding independent claim 53, Excel discloses:

- overlaying a main drawer D_0 on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on D_0 , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning N additional drawers D_1, D_2, \dots, D_N , in an overlay pattern $\{D_1, D_2, \dots, D_N\}$ relative to D_0 wherein N is at least 2, wherein each drawers D_i ($i = 1, 2, \dots, N$) is adapted to being opened or to being closed, wherein the N additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes M buttons B_1, B_2, \dots, B_M respectively identifying a subset S_1, S_2, \dots, S_M

of the data feed, wherein M is at least 1 (**pages 3-6:** the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned in an overlay pattern where each file as each drawer is adapted to being opened or being closed; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein M is at least 1)

- selecting a button B_m wherein m is one of 1, 2, ..., M (**pages 3-4, 5-6:** selection of button Internet, button Network, ... causes the PriorArts drawer to dynamically display the subset data of Internet or Network in spreadsheet format, where m is one of 1, 2, ..., M as seen on pages 3, 5)
- dynamically displaying S_m in spreadsheet format on the Search drawer, wherein said dynamically displaying is triggered by the selecting of the button B_m (**pages 3-4, 5-6:** by selecting button Internet, button Network, ... the PriorArts drawer, which is considered equivalent to the claimed Search drawer, dynamically displays the subset data of Internet or the subset data of Network in spreadsheet format, where m is one of 1, 2, ..., M as seen on pages 3, 5)

Excel does not disclose that the data feed comprises stock bids and offers on a stock exchange, and the buttons B_1, B_2, \dots, B_M are identified with a stock that trades on the stock exchange.

Belzberg discloses that the data feed comprises stock bids and offers on a stock exchange (figures 2B, 3A). Belzberg also discloses the Bid column included in the spreadsheet (figure 3B).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Belzberg into Excel since Belzberg discloses stock bids and offers on a stock exchange and a spreadsheet includes the Bid column, which is the stock exchange data, providing the advantage to incorporate the stock bids and offers in a stock exchange as data in the spreadsheet of Excel. In applying stock exchange data to Excel, each type of stock exchange data such as stock bids or offers would be stored in a subspreadsheet Stock Bids or Offers represented by buttons Stock Bids and Offers included in spreadsheet Stock Exchange. These subspreadsheets and spreadsheet are analogous to spreadsheet PriorArts with subspeadsheets Network and Internet represented by buttons Network and Internet as disclosed in Excel.

Regarding independent claim 54, Excel discloses:

- overlaying a main drawer D_0 on a display screen (page 2: overlaying Book2 on a display screen)
- dynamically displaying, in spreadsheet format on D_0 , a portion of a data feed (page 2: Book2 has a portion of a data feed)
- positioning N additional drawers D_1, D_2, \dots, D_N , in an overlay pattern $\{D_1, D_2, \dots, D_N\}$ relative to D_0 wherein N is at least 2, wherein the N additional drawers include a Search drawer and an Alerts drawer such that that the Alerts drawer includes M buttons B_1, B_2, \dots, B_M respectively identifying a subset S_1, S_2, \dots, S_M of the data feed, wherein M is at least 1 (pages 3-6: the two spreadsheets PriorArts and Abbreviation considered as the additional drawers being positioned

in an overlay pattern; the PriorArts drawer includes the buttons Internet, Network, Document&Database, Multimedia respectively identifying the subsets of the data feed wherein M is at least 1)

- opening or closing drawer D_i wherein i is one of 1, 2, ..., N (pages 3-6: the files PriorArts and Abbreviation as disclosed in spreadsheet format are considered as drawers adapted to being opened or being closed when clicking on the PriorArts button or Abbreviation button for opening and clicking on the X button on the upper right corner of each drawer for closing)

Excel does not disclose that the data feed comprises stock bids and offers on a stock exchange, and the buttons B_1, B_2, \dots, B_M are identified with a stock that trades on the stock exchange.

Belzberg teaches:

- using spreadsheet technology to disclose the data of the stock exchange (col 1, lines 14-39, figure 3B)
- the data feed comprises stock bids and offers on a stock exchange (figures 2B, 3A)
- the Bid column included in the spreadsheet (figure 3B).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Belzberg into Excel since Belzberg discloses stock bids and offers on a stock exchange and a spreadsheet includes the Bid column, which is the stock exchange data, providing the advantage to incorporate the stock bids and offers in a stock exchange as data in the spreadsheet of Excel as well as identifying M

buttons B_1, B_2, \dots, B_M with a stock that trades on the stock exchange. In applying stock exchange data to Excel, each type of stock exchange data such as stock bids or offers would be stored in a subspreadsheet Stock Bids or Offers represented by buttons Stock Bids and Offers included in spreadsheet Stock Exchange. These subspreadsheets and spreadsheet are analogous to spreadsheet PriorArts with subspeadsheets Network and Internet represented by buttons Network and Internet as disclosed in Excel.

Claims 20, 22-24 are for a data display structure included in the method claims 48, 50-52, and are rejected under the same rationale.

20. Claims 21 and 49 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Excel in view of Belzberg as applied to claim 48 above, and further in view of Business Editors & High Tech Writers, Belzberg Technologies Inc. Awarded U.S. Patent for Spreadsheet Trading Technology, Business Wire, Oct 20, 2000, page 1, printed from ProQuest as pages 1-2.

Regarding claim 49, which is dependent on claim 48, Excel does not disclose that the stock exchange is the New York Stock Exchange.

Belzberg discloses that the stock exchange is the Toronto Stock Exchange (page 3, lines 5-10).

Business Editors & High Tech Writers disclose that the Belzberg company has offices located in New York, Chicago, and Toronto (page 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Business Editors & High Tech Writers into Belzberg and Excel for obtaining the New York Stock Exchange as the stock exchange data since the fact that the Belzberg company has offices in New York, Chicago, and Toronto motivates to include the New York Stock Exchange as the stock exchange data in addition to the Toronto Stock Exchange disclosed in Belzberg.

Claim 21 is a data display structure of method claim 49, and is rejected under the same rationale.

21. Claims 9-12, 16, 34-37 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Excel as applied to claims 1 and 26 above, and further in view of Khan et al. (US Pat No. 6,157,934, 12/5/00, filed 10/15/96).

Regarding claim 34, which is dependent on claim 26, Excel discloses sorting the main drawer in accordance with a sort key (pages 2 and 7: sorting data in Book2 as in page 2 in descending order). Excel does not disclose sorting the Search drawer in accordance with the sort key, wherein the sorting of the Search drawer is triggered by the sorting of the main drawer.

Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel for sorting a spreadsheet where sorting said spreadsheet is triggered by the sorting of the main spreadsheet linked to said spreadsheet for the following reason. The fact that the data entered in the client spreadsheets is also entered in the main spreadsheet in accordance to the data linking among the spreadsheets in Khan suggests that sorting the main spreadsheet will affect sorting the client spreadsheets. Similarly, since the Search drawer in the invention is equivalent to a form of a client spreadsheet, and the main drawer is equivalent to a form of a server spreadsheet, sorting the Search drawer by a sort key is affected by sorting the main drawer. In other words, sorting the Search drawer by a sort key is triggered by sorting the main drawer. The combination of Khan into Excel would save time in controlling the changes of data in different spreadsheets linking together when a change is made on the main spreadsheet, a change would be automatically applied the linked spreadsheets.

Regarding claim 35, which is dependent on claim 26, Excel discloses sorting the main drawer in accordance with a sort key (pages 2 and 7: sorting data in Book2 as in page 2 in descending order). Excel does not disclose sorting in accordance with the sort key each additional drawer that is sortable in accordance with the sort key, where the sorting of each additional drawer is triggered by the sorting of the main drawer.

Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel for sorting each additional spreadsheet with a sort key where sorting said additional spreadsheet is triggered by sorting of the main spreadsheet linked to said additional spreadsheet for the following reason. The fact that the data entered in the client spreadsheets is also entered in the main spreadsheet due to the data linking among the spreadsheets in Khan suggests that sorting the main spreadsheet will affect sorting the client spreadsheets due to data linking. Therefore, since each of the additional drawer in the invention is equivalent to a form of a client spreadsheet, and the main drawer is equivalent to a form of a server spreadsheet, sorting each additional drawer by a sort key is affected by sorting the main drawer. In other words, sorting additional drawer by a sort key is triggered by sorting the main drawer. The combination of Khan into Excel would save time in controlling the changes of data in different spreadsheets linking together when a change is made on the main spreadsheet, a change would be automatically applied to the linked spreadsheets.

Regarding claim 36, which is dependent on claim 26, Excel discloses sorting the Search drawer in accordance with a sort key (pages 3 and 8: sorting the Abbreviation as in page 3 in descending order).

Excel does not disclose sorting the main drawer in accordance with the sort key, wherein the sorting of the main drawer is triggered by the sorting of the Search drawer. Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1). Khan further discloses the performance of some functions either in the local spreadsheet or the main spreadsheet (col 4, lines 25-34).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel for sorting the main drawer wherein sorting of the main drawer is triggered by sorting of the Search drawer. The fact that due to the data linking among the spreadsheets, changes can be made to the local spreadsheet or the main spreadsheet in Khan suggests that sorting one spreadsheet will affect sorting the linked spreadsheets. Therefore, since the Search drawer in the invention is equivalent to a form of a client spreadsheet, and the main drawer is equivalent to a form of a server spreadsheet, sorting the main drawer by a sort key is affected by sorting the Search drawer. In other words, sorting the main drawer by a sort key is triggered by sorting the linked drawers. The combination of Khan into Excel would save time in controlling the changes of data in different spreadsheets linking together when a change is made on one spreadsheet, a change would be automatically applied the linked spreadsheets and affect on linked spreadsheets.

Regarding claim 37, which is dependent on claim 26, Excel discloses sorting a first drawer of the N additional drawer in accordance with a sort key (page 8: sorting the Abbreviation spreadsheet in descending order).

Excel does not disclose sorting in accordance with the sort key each remaining drawer of the N additional drawers that is sortable, wherein the sorting of each such remaining drawer is triggered by the sorting of the first drawer.

Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1). Khan further discloses the performance of some functions either in the local spreadsheet or the main spreadsheet (col 4, lines 25-34).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel for sorting each remaining drawer of the N additional drawers wherein sorting of each such remaining drawer is triggered by sorting of the first drawer.

The fact that due to the data linking among the spreadsheets, changes can be made to the local spreadsheet or the main spreadsheet in Khan suggests that sorting one spreadsheet will affect sorting the linked spreadsheets. Therefore, since the Search drawer in the invention is equivalent to a form of a client spreadsheet, and the main drawer is equivalent to a form of a server spreadsheet, sorting a drawer by a sort key is affected by sorting the other linked drawers. The combination of Khan into Excel would save time in controlling the changes of data in different spreadsheets linking together

when a change is made on one spreadsheet, a change would be automatically applied to the linked spreadsheets and affect on linked spreadsheets.

Claims 9-12 are for a data display structure of method claims 34-37, and are rejected under the same rationale.

Regarding claim 16, which is dependent on claim 1, Excel does not disclose a first drawer of the N additional drawer is adapted to display content in accordance with a user command that is directed to the main drawer or to a second drawer of the N additional drawers.

Khan discloses linking data between the main spreadsheet and the client spreadsheets where data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47, figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel since Khan discloses the linking of cells between the two spreadsheets where entering data in a cell of the client spreadsheet would cause the data to be transferred and appear in the main spreadsheet. In other words, Khan discloses displaying the content on a second spreadsheet based on the user command directed on the first spreadsheet linked to the second spreadsheet.

Since a drawer in the invention is merely a form of a spreadsheet as in Excel and Khan, displaying the content on a second spreadsheet based on the user command directed on the first spreadsheet is equivalent to displaying the content on a second drawer

based on the user command executed on the first drawer. The combination of Khan into Excel would enhance the spreadsheet capability that allows data in various spreadsheets is linked together for quickly collecting as well as distributing data in a network system.

22. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Corporation, copyright 1999, Microsoft Excel, referred as Excel, screenshots, pages 1-6 in view of Khan et al. (US Pat No. 6,157,934, 12/5/00, filed 10/15/96).

Regarding claim 42, which is dependent on claim 26, Excel does not disclose:

- executing a user command that is directed to a first drawer of $D_0, D_2, \dots D_N$;
- displaying content on a second drawer of $D_0, D_2, \dots D_N$ based on the user command

Khan discloses the two spreadsheets that links to each other so that the data entered in a cell of the client spreadsheet is transferred to the spreadsheet in the server (col 2, lines 36-47).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Khan into Excel since Khan discloses the linking of cells between the two spreadsheets where entering data in a cell of the client spreadsheet would cause the data to be transferred and appear in the main spreadsheet. In other words, Khan discloses displaying the content on a second spreadsheet based on the user command directed on the first spreadsheet, which is the command for entering data to the first spreadsheet. Since a drawer in the invention is merely a form of a

spreadsheet as in Excel and Khan, displaying the content on a second spreadsheet based on the user command directed on the first spreadsheet is equivalent to displaying the content on a second drawer based on the user command executed on the first drawer. The combination of Khan into Excel would enhance the spreadsheet capability that allows data in various spreadsheets is linked together for quickly collecting as well as distributing data in a network system.

Allowable Subject Matter

23. Claims 27-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
24. Claims 55-56 are allowed.
25. The following is a statement of reasons for the indication of allowable subject matter: the feature displaying the content on a second drawer of $D_0, D_2, \dots D_N$ in response to the selection of a button in the first drawer where the drawers $D_0, D_2, \dots D_N$ are virtual and are spreadsheets containing data presented in an overlay pattern, was not disclosed in the prior art of record.

Response to Arguments

26. Applicant's arguments filed 2/18/05 have been fully considered but they are not persuasive.

Applicants argue that Excel does not disclose more than two spreadsheets appearing together on the display screen, whereas claims 1, 26, and 46-47 require at least 3 drawers (a main drawer and at least 2 additional drawers) appearing together on the display screen (in an overlay pattern) (Remarks, page 30).

Examiner respectfully disagrees. Excel does teach at least three spreadsheets Book2, Prior Art, and Abbreviation appearing on the display screen where Prior Art spreadsheet and the Abbreviation spreadsheet are on the top of Book2 spreadsheet (pages 3-6). Examiner provides page 9 of Excel screenshot to clarify that below the spreadsheets Prior Art and Abbreviation is the Book2 spreadsheet. In other words, spreadsheets Prior Art and Abbreviation are on the top of Book2 when positioning these two additional spreadsheets Prior Art and Abbreviation on Book2 in overlay pattern which is analogous to how the Alert drawer and the Search drawer are on the top of the main drawer in an overlay pattern shown in figure 12 of the invention.

Applicant's argument that "a main drawer that overlays a display screen" and is a physically manipulatable object is not persuasive as the drawers are a virtual item to be displayed on a display screen. The drawers as claimed are not analogous to a piece of furniture as they are virtual and not real.

Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bromley et al. (US Pat No. 5,819,263, 10/6/98, filed 7/19/96).

Goto (US Pat No. 6,037,941, 3/14/00, filed 4/19/96).

Bedford-Roberts (US Pat No. 5,870,092, 2/9/99, filed 1/9/97).

Chang et al. (US Pat No. 5,542,040, 7/30/96).

Krolczyk et al. (US Pat App Pub No 2002/0085040 A1, 7/4/02, filed 12/28/00).

1999, pg. 1.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is 571-272-4125. The examiner can normally be reached on Mon-Fri (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-4125.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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05/20/05